

CLAIM AMENDMENT

RECEIVED
CENTRAL FAX CENTER
JAN 07 2008

What is claimed is:

23. (currently amended) A reinforcing bar coupler for coupling an overlapped first and second reinforcing bars (1, 1a) [[each other, each of the first and second reinforcing bar (1, 1a) including]], which are formed a plurality of semi-annular ribs (12) and longitudinal ribs (11), the reinforcing bar coupler comprising:

a base sleeve (2, 2b) forming semi-cylindrical shape of dual cavities with [[a]] lateral and top openings (23) along with axial direction for seating the first and second reinforcing bar (1, 1a) laid in parallel, inner surface of said base sleeve (2, 2b) forming a plurality of semi-annular grooves (26) for fitting the semi-annular ribs (12) and semi-cylindrical ridges (24) for seating the first and second reinforcing bar (1, 1a), and a pair of locking parts (27) along with both edges of lateral walls (25),

a cover sleeve (3, 3b) forming dual arch shaped cut-outs, inner surface of said cover sleeve (3, 3b) forming semi-annular grooves (32) and semi-cylindrical ridges (31) for fitting the semi-annular ribs (12) of the first and second reinforcing bars (1, 1a) and a flat top surface (33) at opposite side, and

a wedge (4, 4b) having gradually decreasing thickness along with the axial direction, and a pair of locking sections (45) along with both edges (46) for firmly coupling the first and second reinforcing bar (1, 1a) as axially slide advancing into said base sleeve (2, 2b).

24. (currently amended) The reinforcing bar coupler according to claim 23, wherein said locking parts (27) of the base sleeve (2, 2b) are integrally formed a right-triangle shaped edge with inwardly slanted surfaces (29), said locking sections (45) of the wedge (4, 4b) are integrally formed a right-triangle shape groove with outwardly slanted surfaces (46), both

slanted surfaces (29, 46) [[having same slope]] have same slopes for smoothly mating each other and press-bonding the first and second reinforcing bars (1, 1a).

25. (currently amended) The reinforcing bar coupler according to claim 23, wherein interval[[s]] of the semi-annular grooves (26) and semi-cylindrical ridges (24) of said base sleeve (2, 2b) [[have]] has same that of the semi-annular ribs (12) of the first and second reinforcing bars (1, 1a), and outer surface of said base sleeve (2, 2b) formed multiple of semi-annular ribs (22) and longitudinal ribs (21) same shape as the semi-annular ribs (12) and longitudinal ribs (11) of the first and second reinforcing bars (1, 1a).

26. (previously presented) The reinforcing bar coupler according to claim 25, wherein an overall length of said base sleeve (2, 2b) is a half interval of the semi-annular ribs shorter than that of said cover sleeve (3, 3b), a set of serrations (33a) formed at one end portion of the flat top surface (33) of the cover sleeve (3, 3b), said wedge (4, 4b) forming a flat bottom surface (43) for contacting with said flat top surface (33) of the cover sleeve (3, 3b), a set of serrations (43a) formed at one end portion of the flat bottom surface (43) of said wedge (4, 4b), more than one groove (44) formed on said flat bottom surface (43) along with the axial direction, and a scale (48) formed at outer surface.

27. (previously presented) The reinforcing bar coupler according to claim 23, wherein an interval of the semi-annular grooves (26) and semi-cylindrical ridges (24) of the base sleeve (2, 2b) and the cover sleeve (3, 3b) is a half that of the semi-annular ribs (12) of the reinforcing bars (1, 1a).

28. (previously presented) The reinforcing bar coupler according to claim 23, wherein the

base sleeve (2b) and the wedge (4b) are produced through elastic process with a uniform thickness of steel plate, said locking parts (27) of the base sleeve (2b) are bent to have a clearance slightly less than a thickness of said locking sections (45) of the wedge (4b) for tightly press-fitting to the clearance, said locking sections (45) of the wedge (4b) formed laterally bent-up and gradually decreased its height along with the axial direction, a striking head (42) formed at the higher end and a scale (48) formed on the outer surface.

29. (currently amended) A reinforcing bar coupler for coupling an overlapped first and second reinforcing bars (1, 1a) [[each other, each of the first and second reinforcing bar (1, 1a) including]], which are formed a plurality of semi-annular ribs (12) and longitudinal ribs (11), the reinforcing bar coupler comprising:

a base sleeve (2a) forming semi-cylindrical shape of dual cavities with [[a]] lateral and top openings (23) along with axial direction for seating the first and second reinforcing bar (1, 1a) laid in parallel, inner surface of said base sleeve (2a) forming a plurality of semi-annular grooves (26) for fitting the semi-annular ribs (12) and semi-cylindrical ridges (24) for seating the first and second reinforcing bar (1, 1a), and a pair of locking parts (27) along with both edges of lateral walls (25), and

a wedge (4a) having gradually decreasing thickness along with the axial direction, and a pair of locking sections (45) along with both edges (46) for firmly coupling the first and second reinforcing bar (1, 1a) as axially slide advancing into said base sleeve (2a), wherein the wedge (4a) forms a flat bottom surface (43) with a serration (43a), a chamfered edge (41) at a thinner front end and a striking head (42) at the thicker rear end for striking to insert, and a scale (48) on the outer surface.

30. (previously presented) The reinforcing bar coupler according to claim 29, wherein the

base sleeve (2a) and the wedge (4a) are produced through elastic process with a uniform thickness of steel plate, said locking parts (27) of the base sleeve (2a) are bent to have a clearance slightly less than a thickness of said locking sections (45) of the wedge (4a) for tightly press-fitting to the clearance, said locking sections (45) of the wedge (4a) formed laterally bent-up at both edges and gradually decreased its height along with the axial direction, a striking head (42) formed at the higher rear end, and a scale (48) formed on the outer surface.

31. (canceled) [[The reinforcing bar coupler according to claim 29, wherein the wedge (4a) forms a flat bottom surface (43) with a serration (43a), a chamfered edge (41) at a thinner front end and a striking head (42) at the thicker rear end for striking to insert, and a scale (48) on the outer surface.]]

32. (currently amended) The reinforcing bar coupler according to claim 29, wherein said locking parts (27) of the base sleeve (2a) are integrally formed a right-triangle shape edge with outwardly slanted surfaces (29) at both edges of the lateral walls (25), said locking sections (45) of the wedge (4a) are integrally formed a U-shape hook with inwardly slanted surfaces (46), both slanted surfaces (29, 46) [[having same slope]] have same slopes for smoothly mating each other and firmly press-bonding the first and second reinforcing bars (1, 1a), a bottom surface of the wedge (4a) formed a serration (43a), and a scale (48) formed on the outer surface.

33. (canceled) [[A reinforcing bar coupler for coupling a pair of butted first and second reinforcing bar (1, 1a), each of the first and second reinforcing bar (1, 1a) including a plurality of semi-annular ribs (12) and longitudinal ribs (11), the reinforcing bar coupler

comprising:]]

[[a base sleeve (2c, 2d) forming a semi-cylindrical shaped cavity with a lateral opening (23) along with axial direction for seating the first and second reinforcing bar (1, 1a) laid in butt, inner surface of said base sleeve (2c, 2d) forming a plurality of semi-annular grooves (26) for fitting the semi-annular ribs (12) and semi-cylindrical ridges (24) for seating the first and second reinforcing bar (1, 1a), and a pair of locking parts (27) along with both edges of lateral walls (25).]]

[[a cover sleeve (3c, 3d) forming an arch shaped cut-out, inner surface of said cover sleeve (3c, 3d) forming semi-annular grooves (32) and semi-cylindrical ridges (31) for fitting the semi-annular ribs (12) of the first and second reinforcing bars (1, 1a) and a flat top surface (33) at opposite side, and]]

[[a wedge (4c, 4d) having gradually decreasing thickness along with the axial direction, and a pair of locking sections (45) along with both edges (46) for firmly coupling the first and second reinforcing bar (1, 1a) as axially slide advancing into said base sleeve (2c, 2d).]]

34. (canceled) [[The reinforcing bar coupler according to claim 33, wherein said locking parts (27) of the base sleeve (2c, 2d) are integrally formed a right-triangle shaped edge with inwardly slanted surfaces (29), said locking sections (45) of the wedge (4c, 4d) are integrally formed a right-triangle shape groove with outwardly slanted surfaces (46), both slanted surfaces (29, 46) having same slope for smoothly mating each other and press-bonding the first and second reinforcing bars (1, 1a).]]

35. (canceled) [[The reinforcing bar coupler according to claim 33, wherein said locking parts (27) of the base sleeve (2c) are formed to taper down from both end openings to center,

a pair of the wedge (4c) are inserted from both end openings of the base sleeve (2c) for press-bonding the cover sleeve (3c) and the first and second reinforcing bars (1, 1a), together.]]

36. (canceled) [[The reinforcing bar coupler according to claim 33, wherein said base sleeve (2c, 2d) and said cover sleeve (3c, 3d) form a space (28, 34) slightly deeper than the semi-annular grooves (26, 32) at their center portion for resting the ends of the butted first and second reinforcing bar (1, 1a).]]

37. (canceled) [[The reinforcing bar coupler according to claim 33, wherein an overall length of the base sleeve (2c, 2d) is a half interval of the semi-annular rib shorter than that of the cover sleeve (3c, 3d), a half of semi-annular groove (32) formed at mouth of the cover sleeve (3c, 3d), a set of serrations (33a) formed at one end portion of the flat top surface (33), said wedge (4c, 4d) having a flat bottom surface (43) for contacting with said flat top surface (33) of the cover sleeve (3c, 3d), a set of serrations (43a) formed at one end portion of said flat bottom surface (43), at least one linear groove (44) formed on the flat bottom surface (43) along with the axial direction of the wedge (4, 4b), and a scale (48) formed on outer surface.]]

38. (canceled) [[The reinforcing bar coupler according to claim 33, wherein the base sleeve (2e) and the wedge (4e) are produced through elastic process with a uniform thickness of steel plate, said locking parts (27) of the base sleeve (2e) are bent to have a clearance slightly less than a thickness of said locking sections (45) of the wedge (4e) for tightly press-fitting to the clearance, said locking sections (45) of the wedge (4e) formed laterally bent-up both edges and gradually decreased its height along with the axial direction, a striking head (42) formed at the higher rear end, and a scale (48) formed on outer surface.]]